

What is claimed is:

1                   1.     A weightlifting apparatus for supporting a dumbbell, the  
 2     apparatus comprising :  
 3                   first and second side frames;  
 4                   elevation adjustment means carried on the first and second side frames;  
 5     and  
 6                   at least one dumbbell support coupled to the elevation adjustment  
 7     means for supporting a dumbbell in a plurality of different elevations.

1                   2.     The weightlifting apparatus of claim 1 wherein the dumbbell  
 2     support comprises:  
 3                   an angularly adjustable, pivotal portion adapted for receiving and  
 4     supporting a dumbbell.

1                   3.     The weightlifting apparatus of claim 2 wherein the angular  
 2     adjustable, pivotal portion includes a dumbbell receiver for supporting the dumbbell.

1                   4.     The weightlifting apparatus of claim 3 further comprising:  
 2                   a notch formed in the dumbbell receiver to facilitate access to the  
 3     dumbbell mounted on the angularly adjustable, pivotal portion.

1                   5.     The weightlifting apparatus of claim 3 wherein the dumbbell  
 2     receiver comprises:  
 3                   a plate pivotally coupled to the crossbar mount, the plate including a  
 4     plurality of spaced apertures; and  
 5                   a latch carried on the crossbar mount and releasably engagable with one  
 6     of the apertures to adjust the angular position of the plate with respect to the crossbar  
 7     mounting portion.

1                   6.     The weightlifting apparatus of claim 2 wherein the crossbar  
 2     mounting portion comprises:

3 a collar mountable over the crossbar.

1 7. The weightlifting apparatus of claim 1 further comprising:  
2 a horizontal crossbar engaged with the elevation adjustment means, the  
3 dumbbell supports mounted on the crossbar.

1 8. The weightlifting apparatus of claim 7 when the dumbbell  
2 support comprises:  
3 a crossbar mounting portion for movably adjusting the dumbbell  
4 support along the crossbar.

1 9. The weightlifting apparatus of claim 8 further comprising:  
2 means for latching the crossbar mounting portion to the crossbar in one  
3 of a plurality of positions along the crossbar.

1 10. The weightlifting apparatus of claim 8 further comprising:  
2 means for latching the crossbar mounting portion to the crossbar in a  
3 plurality of discrete positions.

1 11. The weightlifting apparatus of claim 10 wherein the latching  
2 means comprises:  
3 a plurality of spaced apertures along the crossbar; and  
4 a spring biased pin carried on the crossbar mounting portion releasably  
5 engagable with one of the apertures in the crossbar.

1 12. The weightlifting apparatus of claim 7 wherein the dumbbell  
2 support comprises two dumbbell supports.

1 13. The weightlifting apparatus of claim 1 wherein the elevation  
2 adjustment means comprises:  
3 a threaded screw supported on each of the first and second side frames;

4 a rotative drive coupled to both screws for bi-directionally rotating both  
 5 screws; and  
 6 the dumbbell support coupled to each of the screws for elevational  
 7 movement.

1 14. The weightlifting apparatus of claim 13 further comprised:  
 2 a horizontal crossbar movably coupled to each screw, the dumbbell  
 3 support carried on the crossbar.

1 15. The weightlifting apparatus of claim 13 wherein the drive  
 2 comprises:  
 3 a electric motor mounted to the first and second side frames, the motor  
 4 the electric motor having an output shaft; and  
 5 an elongated member extending to and coupled to each screw and to  
 6 the output shaft for transmitting rotation of the motor output shaft to each of the  
 7 screws.

1 16. The weightlifting apparatus of claim 13 further comprising:  
 2 a rotative drive coupled to both screws for bi-directionally rotating both  
 3 screws, the drive including:  
 4 a first rotatable member;  
 5 second and third rotatable members each fixedly coupled to one of the  
 6 screws; and  
 7 an elongated member extending to and coupled to each of the first,  
 8 second and third rotatable members for transmitting rotation of the drive to each of  
 9 the screws.

1 17. The weightlifting apparatus of claim 16 wherein:  
 2 the first, second and third rotatable members include teeth; and  
 3 the elongated member includes teeth meshingly engagable with the  
 4 teeth on the first, second and third rotatable members.

1                   18.     The weightlifting apparatus of claim 16 wherein the drive  
2 comprises:  
3                   a rotatable shaft coupled to the first rotative member such that rotation  
4 of the shaft rotates the first rotative member.

1                   19.     A weightlifting apparatus for supporting a dumbbell, the  
2 apparatus comprising:  
3                   first and second side frames;  
4                   a horizontal crossbar extending between the first and second side  
5 frames;  
6                   a pair of dumbbell supports movably mounted on the crossbar; and  
7                   a latch on each dumbbell support for releasably latching each dumbbell  
8 support in a horizontally adjustable position along the crossbar.

1                   20.     The weightlifting apparatus of claim 19 wherein the latch  
2 comprises:  
3                   a plurality of spaced apertures formed along the crossbar; and  
4                   a latch pin carried on the each dumbbell support, the pin releasably  
5 engagable with one of the apertures in the crossbar to releasably latch the dumbbell  
6 support in a selected horizontally adjustable position along the crossbar.

1                   21.     The weightlifting apparatus of claim 20 further comprising:  
2                   a pair of dumbbell supports movably mounted on the crossbar; and  
3                   a latch on each dumbbell support for releasably latching each dumbbell  
4 support in a horizontally adjustable position along the crossbar.

1                   22.     The weightlifting apparatus of claim 21 further comprising:  
2                   the crossbar mounting portion carried on each dumbbell support and  
3 movable along the crossbar;

an angularly adjustable, pivotal portion coupled to the crossbar mounting portion, for receiving and supporting a dumbbell; a dumbbell receiver carried on the pivotal portion; and means for locking the dumbbell receiver in one of a plurality of angular positions with respect to the crossbar mounting portion.

23. A weightlifting apparatus for supporting a dumbbell, the apparatus comprising:  
first and second side frames;  
a horizontal crossbar extending between the first and second side frames;  
a pair of dumbbell supports movably mounted on the crossbar; the crossbar mounting portion carried on each dumbbell support and movable along the crossbar;  
an angularly adjustable, pivotal portion coupled to the crossbar mounting portion, for receiving and supporting a dumbbell; a dumbbell receiver carried on the pivotal portion; and means for locking the dumbbell receiver in one of a plurality of angular positions with respect to the crossbar mounting portion.

24. A weightlifting apparatus for supporting a dumbbell, the apparatus comprising:  
first and second side frames;  
a crossbar extending horizontally between the first and second side frames;  
elevation adjustment means carried on the first and second side frames and coupled to the crossbar for moving and supporting the crossbar in a plurality of different elevations;  
at least one dumbbell support coupled to the crossbar for supporting a dumbbell; and  
a foot rest disposed within the first and second side frames.

- 1                    25.     The weightlifting apparatus of claim 24 wherein the foot rest  
 2 comprises:  
 3                    a support frame providing vertical and for/aft adjustable positioning of  
 4 a foot support member.

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